

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 January 2002 (03.01.2002)

PCT

(10) International Publication Number
WO 02/001415 A3

(51) International Patent Classification⁷: **G06F 17/30**
(21) International Application Number: **PCT/US01/19768**
(22) International Filing Date: **21 June 2001 (21.06.2001)**
(25) Filing Language: **English**
(26) Publication Language: **English**
(30) Priority Data:
60/214,299 26 June 2000 (26.06.2000) US
09/877,370 7 June 2001 (07.06.2001) US

(71) Applicant: **INFORMATICA CORPORATION**
[US/US]; 1200 Chrysler Drive, Menlo Park, CA 94025 (US).

(72) Inventors: **KANCHWALLA, Firoz**; 396 Ano Nuevo Avenue, Apt. #310, Sunnyvale, CA 94085 (US). **LYLE, David**; 331 Los Gatos Boulevard, Los Gatos, CA 95032 (US). **BAIS, Sujit**; 655 South Fair Oaks Avenue, Apt. #L107, Sunnyvale, CA 94086 (US). **MAADAPUSI, Srinivasan**; 450 North Mathilda Avenue, Apt. #E202, Sunnyvale, CA 94085 (US). **DONGRE, Amol**; 655 South Fair Oaks Avenue, Apt. #I-107, Sunnyvale, CA 94086 (US). **SOMAKUMAR, Premkumar**; 655 South Fair Oaks Avenue, Apt. #C-108, Sunnyvale, CA 94086 (US).

(74) Agents: **GALLENSON, Mavis, S. et al.**; 5670 Wilshire Blvd. Suite 2100, Los Angeles, CA 90036 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

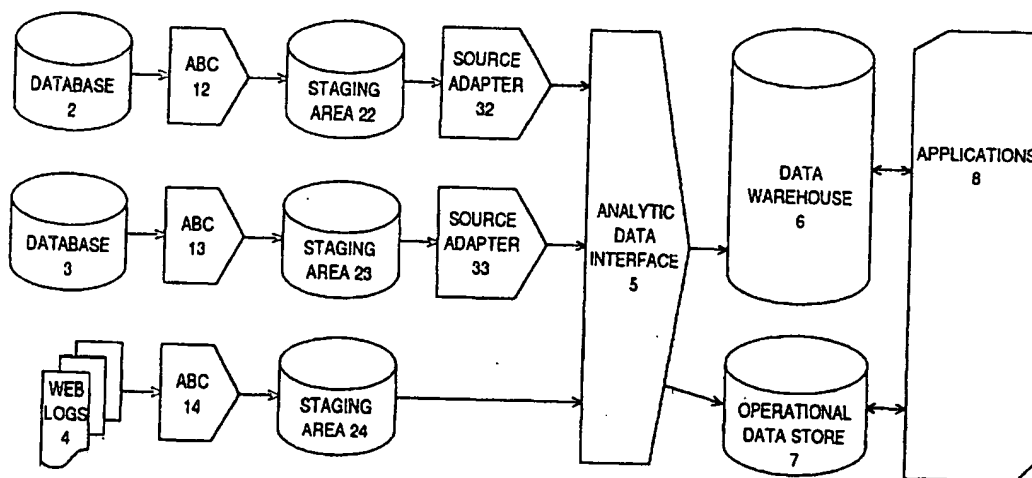
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
16 October 2003

[Continued on next page]

(54) Title: **COMPUTER METHOD AND DEVICE FOR TRANSPORTING DATA**



(57) Abstract: A method and apparatus for transporting data for a data warehousing application. Data is extracted from one or more source containing data having a standard data structure and is translated into data that contains meaningful business terms. The translated data is then stored. In the present embodiment, an analytic business component is operable for extracting data from the source, translating the extracted data and for storing the translated data into a staging area. The translated data is then processed to obtain data having a common structure. In the present embodiment, a source adapter processes the translated data to obtain data having a common structure. The data having a common structure is then transformed into a format suitable for loading into a data warehouse. The data is then stored in a data warehouse.

WO 02/001415 A3



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 01/19768

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F17/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| X | WHITE C: "MANAGING DATA TRANSFORMATIONS" BYTE, MCGRAW-HILL INC. ST PETERBOROUGH, US, vol. 22, no. 12, 1 December 1997 (1997-12-01), pages 53-54, XP000728707 ISSN: 0360-5280 | 1-3, 10, 12, 15, 16 |
| Y | page 53, left-hand column, line 18 -page 53, middle column, line 6 page 54, left-hand column, line 20 -page 54, right-hand column, line 46 --- -/-- | 5 |

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

27 June 2003

Date of mailing of the international search report

12/08/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Boyadzhiev, Y

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/19768

| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| Y | WEYMAN P J: "THE CASE FOR A PROCESS-DRIVEN APPROACH TO DATA WAREHOUSING" DATABASE AND NETWORK JOURNAL, A.P. PUBLICATIONS, LONDON, GB, vol. 27, no. 1, 1 February 1997 (1997-02-01), pages 3-6, XP002074806 ISSN: 0265-4490 | 5 |
| A | page 3, right-hand column, line 10 -page 3, right-hand column, line 43 page 5, middle column, line 1 -page 5, right-hand column, line 19 | 1-4,6-16 |
| A | ----- DUNCAN K ET AL: "Optimizing the data warehousing environment for change: the persistent staging area" CUTTER IT JOURNAL, JUNE 1999, CUTTER INF. CORP, USA, vol. 12, no. 6, pages 28-35; XP002245741 ISSN: 1048-5600 page 28, right-hand column, line 25 -page 28, right-hand column, line 40 page 29, left-hand column, line 37 -page 30, left-hand column, line 14 page 32, left-hand column, line 19 -page 34, left-hand column, line 32 | 1-16 |
| A | ----- US 5 781 911 A (YONG DENNIS ET AL) 14 July 1998 (1998-07-14) column 2, line 43 -column 4, line 22 column 5, line 34 -column 5, line 62 ----- | 1-16 |

Information on patent family members

PCT/US 01/19768

| | | | |
|------------|---|------------|------|
| US 5781911 | A | 14-07-1998 | NONE |
|------------|---|------------|------|